



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/631,332

07/30/2003

Jeremy A. Davis

10012851-2

1404

7590

09/29/2004

HEWLETT-PACKARD COMPANY

Intellectual Property Administration

P. O. Box 272400

Fort Collins, CO 80527-2400

EXAMINER

STEWART JR, CHARLES W

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/631,332	Applicant(s) DAVIS ET AL.	
	Examiner Charles W. Stewart, Jr.	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed July 3, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on July 30, 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/237,274.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>July 30, 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine ground in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 428, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969). A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (May be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-32 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of Davis et al. U.S. Patent No. 6, 722,752 B2.

Davis et al. discloses in claim 1, with respect to claim 5, a pen maintenance system, comprising: a pen having a printhead and a chamber for holding ink; a supply of ink; a sensor for monitoring changes in the amount of ink in the chamber; and a pump

Art Unit: 2853

connected to the chamber for changing the pressure in the chamber to selectively draw ink into or expel ink from the chamber.

Claim 2, with respect to claim 5, an ink supply reservoir separate from the pen.

Claim 3, with respect to claim 7, wherein the pump is selectively placed in fluid communication with the chamber.

Claim 4, with respect to claim 3, wherein the pump is for decreasing the pressure in the chamber.

Claim 5, with respect to claim 4, wherein the pump is for increasing the pressure in the chamber.

Claim 6, with respect to claim 6, a pen, comprising the steps: (a) connecting a pump to a pen having an ink chamber; and (b) operating the pump to modify the pressure in the chamber to thereby modify the amount of ink in the ink chamber.

Claim 7, with respect to claim 5, the step of detecting pressure in the ink chamber to generate a chamber pressure value, and comparing the chamber pressure value to a predetermined pressure value.

Claim 8, with respect to claim 5, wherein the step of detecting pressure in the ink chamber includes the step of providing a sensor in the ink chamber.

Claim 9, with respect to claim 3, wherein operation of the pump is initiated when the chamber pressure value differs from the predetermined pressure value by a predetermined value.

Claim 10, with respect to claim 6, the step of detecting a fluid level in the ink chamber.

Art Unit: 2853

Claim 11, with respect to claim 6, wherein operation of the pump is initiated upon detection of a change in fluid level in the ink chamber.

Claim 12, with respect to claim 5, wherein the step of detecting the fluid level in the ink chamber includes the step of providing a fluid level sensor in the ink chamber.

Claim 13, with respect to claim 3, wherein operation of the pump causes ink to flow into the ink chamber from an ink source.

Claim 14, with respect to claim 6, the step of fluidly connecting the ink chamber to the ink source.

Claim 15, with respect to claim 5, wherein the pen includes nozzles and ink flows into the ink chamber through the nozzles.

Claim 16, with respect to claim 5, wherein the pump reduces pressure in the ink chamber to cause ink to flow into the ink chamber through the nozzles.

Claim 17, with respect to claim 6, wherein the pump operates until the internal pressure in the ink chamber reaches a predetermined value.

Claim 18, with respect to claim 6, wherein the pump changes the pressure in the ink chamber to cause ink to flow out of the ink chamber.

Claim 19, with respect to claim 3, wherein the pump increases the pressure in the ink chamber.

Claim 20, with respect to claim 3, wherein the pen includes nozzles and ink flows out of the ink chamber and through the nozzles.

Claim 21, with respect to claim 5, the step of capturing the ink that flows through the nozzles.

Art Unit: 2853

Claim 22, with respect to claim 5, the step of cleaning the captured ink.

Claim 23, with respect to claim 5, the step of recharging the pen with cleaned ink.

Claim 24, with respect to claim 6, the step of moving the pen into fluid communication with an ink supply and wherein the pump causes ink to flow into the ink chamber.

Claim 25, with respect to claim 6, where the pen includes nozzles and wherein ink flows into the ink chamber through the nozzles.

Claim 26, with respect to claim 5, a pen having an ink reservoir and sensor that detects the amount of ink in the reservoir; an ink supply that supplies ink to the reservoir; and a pump for modifying the pressure in the reservoir to selectively expel ink from the reservoir or to cause ink to enter the reservoir.

Claim 27, with respect to claim 3, wherein the pen includes nozzles, and wherein operation of the pump decreases the pressure in the reservoir to cause ink to flow from the ink supply through the nozzles and into the reservoir.

Claim 28, with respect to claim 6, wherein the pen includes nozzles, and wherein operation of the pump increases the pressure in the reservoir to cause ink to flow through the nozzles and out of the reservoir.

Claim 29, with respect to claim 5, a pen having a printhead and an ink chamber; a sensor for monitoring the amount of ink in the ink chamber; a pump fluidly coupled to the ink chamber; an ink supply having a cap defining a seat configured to receive the printhead so as to define a seal between the printhead and the cap; wherein ink may selectively be expelled from the pen and into the ink supply, and introduced to the pen

Art Unit: 2853

from the ink supply through the printhead by operation of the pump.

Claim 30, with respect to claim 6, wherein the pen is selectively fluidly connectable to the ink supply reservoir and the pump is configured for altering the pressure in the ink chamber to either cause ink from the ink supply reservoir to flow into the ink chamber, or cause ink to flow from the ink chamber to the ink supply reservoir.

Claim 31, with respect to claim 7, an actuator for selectively moving the pump into and out of fluid communication with the ink.


Claim 32, with respect to claim 8, an actuator for selectively moving the ink supply reservoir into and out of fluid communication with the printhead.

Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Charles Stewart, Jr. whose telephone number is (571) 272-2154.

Charles Stewart, Jr. 

September 21, 2004


Stephen D. Meier
Primary Examiner